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United States Patent [19]**Fraser et al.**[11] **Patent Number:** **5,905,974**[45] **Date of Patent:** **May 18, 1999**[54] **AUTOMATED AUCTION PROTOCOL PROCESSOR**[75] Inventors: **Stuart A. Fraser, Armonk; Howard Lutnick, New York, both of N.Y.; Bijoy Paul, North Brunswick, N.J.**[73] Assignee: **Cantor Fitzgerald Securities, New York, N.Y.**[21] Appl. No.: **08/766,733**[22] Filed: **Dec. 13, 1996**[51] Int. Cl.⁶ **G06F 17/60; G06F 17/00; G06F 19/00**[52] U.S. Cl. **705/37; 705/35; 705/36**[58] Field of Search **705/35, 36, 37**[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Allen R. MacDonald*Assistant Examiner*—James W. Myhre*Attorney, Agent, or Firm*—Hopgood, Calimafde, Kalil & Judlowe LLP[57] **ABSTRACT**

A data processing system for implementing transaction management of auction-based trading for specialized items such as fixed income instruments. The data processing system provides a highly structured trading protocol implemented through a sequence of trading paradigms. The system employs a distributed computer processing network linking together a plurality of commonly programmed controlled workstations. The protocol and its programmed controlling logic enhances trading efficiency, rewards market makers and fairly distributes market opportunity to system users.

30 Claims, 12 Drawing Sheets